

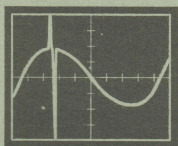
SurgeArrest

Thank you for selecting American Power Conversion SurgeArrest! It has been designed to provide the highest degree of protection from utility line spikes, surges and EMI/RFI noise.

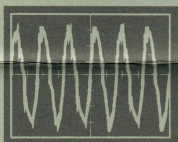
SAVE THESE INSTRUCTIONS !

What are surges and noise?

● The picture to the right shows what a typical "medium" amplitude surge or spike looks like on the utility voltage. Surges up to 15 times larger than this are easily suppressed by your SurgeArrest. Surges are commonly caused by nearby lightning activity and motor load switching created in air conditioners, elevators, refrigerators, etc.



Surge



Electrical Noise

● The picture to the left shows what EMI/RFI (Electromagnetic and Radio Frequency Interference) looks like when present on the utility voltage. SurgeArrest "filters" out this noise with components whose electrical resistance is very high at radio frequencies. EMI/RFI noise is commonly created by the same activity which produces surges but can also be caused by nearby radio transmitters.

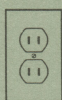
Important Safety, Grounding and Installation Instructions

Before beginning with your installation, please read and understand the following safety instructions.

● The SurgeArrest suppressor is intended for indoor use only. Although your SurgeArrest surge suppressor is very rugged, its internal components are not sealed from the environment. Do not install SurgeArrest near heat emitting appliances such as a radiator or heat register. Do not install this product where excessive moisture is present; for example near a bathtub, sink, pool, basement floor, fish tank, etc.

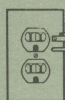
● Plug your SurgeArrest suppressor into a three wire, grounded outlet only. Do not use extension cords or adapters with this product. **If at any time your surge protector indicates a SITE**

2 wire

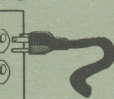


X

3 wire



✓



WIRING FAULT, do not use the product - a qualified electrician should be summoned to correct the building wiring.

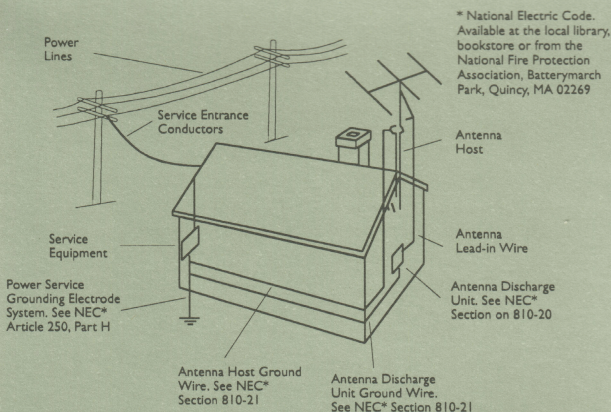
- Never install telephone or CATV wiring during a lightning storm.

- Where applicable, SurgeArrest provides protection from surges present on standard two wire "dial up" telephone service. Other communications networks which happen to use modular jacks may not benefit from this protection.

CAUTION: The telephone protection feature of this product could be rendered inoperable if improperly installed - see below.

- For SurgeArrest models with telephone line protection, use the supplied telephone cord and connect the jack marked IN on the suppressor to the phone wall outlet. Connect your fax machine, modem, etc. to the jack marked OUT.

- SurgeArrest models with CATV protection are designed to provide maximum protection when used in conjunction with an antenna grounding system installed according to Section 810 or 820 of the National Electric Code, ANSI/NFPA No. 70-1993. The figure below shows a properly installation. CATV coaxial cable should be properly grounded by the cable TV company per National Electric Code Art. 820-40. If you have any doubt about your antenna or CATV cable system being correctly installed, contact a licensed electrician.



CAUTION: This product is intended for use where the antenna or CATV system is properly grounded. To reduce the risk of electric shock, inspect your premises carefully. Do not use this product if proper grounding cannot be verified.

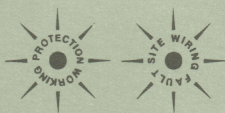
- Use the keyhole outline template on the following panel to mount your SurgeArrest (corded units only) to a wall. Fold this manual in half so the third and fourth panel is revealed. Hold the template over the desired area and insert a push pin through each keyhole cross. Turn a #6 pan head screw (not supplied) into the wall at the holes left by the racks until only 1/4" (0.5cm) of screw

threads are exposed. Mount the suppressor over the screw heads and slide to engage the keyhole slots.

Operation

- The Site Wiring Fault light will illuminate when your building's wiring is faulty. This could

mean that the ground wiring is missing, the hot and neutral wires are reversed, or the neutral circuit is overloaded. If illuminated, a qualified electrician should be called to correct the service wiring. When SurgeArrest is fully loaded, the Site Wiring Fault indicator may flicker - this is normal and may not be indicative of a fault. Even though equipment appears to operate normally, faulty wiring could become a shock hazard which would prevent your SurgeArrest from providing rated surge and noise suppression.

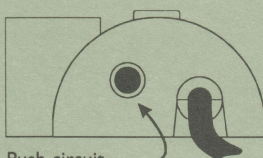


- The Protection Working light is normally illuminated. The light is extinguished when SurgeArrest has disconnected itself from the utility due to a sustained ultra high energy surge such as a direct lightning strike. In this way, such catastrophic events will not have the opportunity to reach your equipment. If it is found that this light is extinguished, first check the circuit breaker or I/O power switch (on corded suppressors only) to make sure that the suppressor is receiving power.

- The I/O power switch (on corded units only) controls power to all receptacles and can be used as a master system switch. If you plan to put the SurgeArrest on the floor, be careful to locate it such that the switch won't accidentally be kicked to the off position.

- The SurgeArrest circuit breaker (on corded suppressors only) is tripped when the button is extended. This means that the suppressor is overloaded and at least one piece of equipment needs to be unplugged. The circuit breaker is

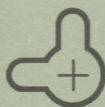
rated to trip at the same overload as most home and office utility service branch protectors (15 Amps).



Push circuit breaker button to reset



4.5" (11.43 cm)



SPECIFICATIONS	PERSONAL Series
Nominal Line Voltage	120 Vac, 50/60 Hz
Max. Line Current	15 Amps, continuous
Let-through Voltage <small>As a percent of applied NM± 6kV ANSI/IEEE C62.41 (587) Category A Ring Wave test</small>	<5%
UL 1449 TVSS Rating L-N	330V
UL 1449 TVSS Rating L-G	330V
UL 1449 TVSS Rating N-G	330V
Surge Energy Capacity <small>Total performance rated with (1) 10x100µs pulse</small>	240 Joules
Peak Surge Current <small>Performance rated with (1) 8x20µs pulse</small>	6.5 kAmps NM 13 kAmps CM
EMI/RFI Noise Rejection <small>NM rejection over 100 kHz to 10 MHz. Tested using 50 ohm LISN, swept frequency analyzer</small>	>20-60 dB

SPECIFICATIONS	PROFESSIONAL Series
Nominal Line Voltage	120 Vac, 50/60 Hz
Max. Line Current	15 Amps, continuous
Let-through Voltage <small>As a percent of applied NM± 6kV ANSI/IEEE C62.41 (587) Category A Ring Wave test</small>	<1.4%
UL 1449 TVSS Rating L-N	330V
UL 1449 TVSS Rating L-G	330V
UL 1449 TVSS Rating N-G	330V
Surge Energy Capacity <small>Total performance rated with (1) 10x100µs pulse</small>	320 Joules
Peak Surge Current <small>Performance rated with (1) 8x20µs pulse</small>	13 kAmps NM 13 kAmps CM
EMI/RFI Noise Rejection <small>NM rejection over 100 kHz to 10 MHz. Tested using 50 ohm LISN, swept frequency analyzer</small>	>20-60 dB

SPECIFICATIONS	PERFORMANCE, NETWORK Series
Nominal Line Voltage	120 Vac, 50/60 Hz
Max. Line Current	15 Amps, continuous
Let-through Voltage <small>As a percent of applied NM± 6kV ANSI/IEEE C62.41 (587) Category A Ring Wave test</small>	<0.6% for 7 outlet models <0.7% for 3 outlet models
UL 1449 TVSS Rating L-N	330V
UL 1449 TVSS Rating L-G	330V
UL 1449 TVSS Rating N-G	330V
Surge Energy Capacity <small>Total performance rated with (1) 10x100µs pulse</small>	480 Joules
Peak Surge Current <small>Performance rated with (1) 8x20µs pulse</small>	13 kAmps NM 26 kAmps CM
EMI/RFI Noise Rejection <small>NM rejection over 100 kHz to 10 MHz. Tested using 50 ohm LISN, swept frequency analyzer</small>	>30 - 70 dB for 7 outlet models >40 - 70 dB for 3 outlet models

NM: normal mode (L-N). CM: common mode (L+N-G). All specifications provided according to NEMA standards LS-I-1992

LIMITED PRODUCT WARRANTY

American Power Conversion offers a limited Lifetime Warranty on SurgeArrest surge suppressors.

APC warrants its products to be free from defects in materials and workmanship under normal use and service for the lifetime of the original purchaser. Its obligation under this warranty is limited to repairing or replacing, at its sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from APC or an APC Service Center with transportation charges prepaid and must be accompanied by a brief description of the problem and proof of date and place of purchase. This warranty applies only to the original purchaser.